



2161  
AF/2161

PATENT  
Attorney Docket No.: ITLV-000102

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:	)	Group Art Unit: 2161
Robert Olan Keith Jr.	)	Examiner: Nguyen, Cam Linh T.
Serial No.: 09/801,138	)	<b>TRANSMITTAL LETTER</b>
Filed: March 6, 2001	)	162 North Wolfe Road
For: <b>METHOD OF AND APPARATUS</b>	)	Sunnyvale, California 94086
<b>FOR PERFORMING A RESEARCH</b>	)	(408) 530-9700
<b>TASK BY INTERCHANGEABLY</b>	)	
<b>UTILIZING A MULTITUDE OF</b>	)	
<b>SEARCH METHODOLOGIES</b>	)	Customer Number 28960

MS: Appeal Brief - Patents  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Enclosed please find an Appeal Brief submitted in triplicate in support of the patent owner's Notice of Appeal filed on August 9, 2005 for filing with the U.S. Patent and Trademark Office. Also attached is U.S. Patent No. 6,253,188, U.S. Patent No. 5,604,7721, a copy of the Final Office Action dated: May 13, 2005 and a check in the amount of \$250.00 to cover the Appeal Brief fee.

The Commissioner is authorized to charge any additional fee or credit any overpayment to our Deposit Account No. 08-1275. **An originally executed duplicate of this transmittal is enclosed for this purpose.**

Respectfully submitted,  
HAVERSTOCK & OWENS LLP

Dated: October 6, 2005

By: Jonathan O. Owens  
Jonathan O. Owens  
Reg. No.: 37,902

Attorneys for Applicant

CERTIFICATE OF MAILING (37 CFR § 1.8(a))

I hereby certify that this paper (along with any referred to as being attached or enclosed) is being deposited with the U.S. Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to the: Commissioner for Patents, P.O. Box 1450 Alexandria, VA 22313-1450

HAVERSTOCK & OWENS LLP  
Date: 10/6/05 By: [Signature]



PATENT  
Attorney Docket No.: ITLV-00102

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:	)	Group Art Unit: 2161
Robert Olan Keith Jr.	)	Examiner: Nguyen, Cam Linh T
Serial No.: 09/801,138	)	
Filed: March 6, 2001	)	<b>APPEAL BRIEF</b>
For: <b>METHOD AND APPARATUS FOR</b>	)	162 North Wolfe Road
<b>PERFORMING A RESEARCH</b>	)	Sunnyvale, California 94086
<b>TASK BY INTERCHANGEABLY</b>	)	(408) 530-9700
<b>UTILIZING A MULTITUDE OF</b>	)	Customer No.: 28960
<b>SEARCH METHODOLOGIES</b>	)	

---

Mail Stop Appeal Brief-Patents  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

In furtherance of the Applicant's Notice of Appeal filed on August 9, 2005, this Appeal Brief is submitted herewith in triplicate. This Appeal Brief is submitted in support of the Applicant's Notice of Appeal, and further pursuant to the final rejection mailed on May 13, 2005, in which Claims 1, 4-15, 17-24, 49, 52-63, 65-73, 76-87 and 89-96 were rejected. The Applicant submits this Appeal Brief to the Board of Patent Appeals and Interferences in compliance with the requirements of 37 C.F.R. § 41.37, as stated in *Rules of Practice Before the Board of Patent Appeals and Interferences (Final Rule)*, 69 Fed. Reg. 49959 (August 12, 2004). The Applicant contends that the rejections of Claims 1, 4-15, 17-24, 49, 52-63, 65-73, 76-87 and 89-96 in this proceeding are in error and are overcome by this appeal.

10/12/2005 NNGUYEN1 00000121 09801138

01 FC:2402

250.00 OP

**I. REAL PARTY IN INTEREST**

As the assignee of the entire right, title, and interest in the above-captioned patent application, the real party in interest in this appeal, is:

The Web Access, Inc.  
100 Century Center Court, Ste. 320  
San Jose, CA 95112

per the assignment document filed on March 6, 2001.

**II. RELATED APPEALS AND INTERFERENCES**

The Applicant is not aware of any other appeals or interferences related to the present application.

**III. STATUS OF THE CLAIMS**

Claims 1, 4-15, 17-24, 49, 52-63, 65-73, 76-87 and 89-96 stand rejected under 35 U.S.C. § 103 as being unpatentable over U.S. Patent No. 6,253,188 to Witek et al. (hereinafter, Witek, a copy of which is attached as Exhibit A) in view of U.S. Patent No. 5,604,772 to Botto et al. (hereinafter, Botto, a copy of which is attached as Exhibit B). Within this Appeal Brief, the rejections of Claims 1, 4-15, 17-24, 49, 52-63, 65-73, 76-87 and 89-96 are appealed.

**IV. STATUS OF THE AMENDMENTS FILED AFTER FINAL REJECTION**

No amendments have been filed after the Office Action mailed on May 13, 2005.

**V. SUMMARY OF CLAIMED SUBJECT MATTER**

The invention disclosed in the present application number 09/801,138 is directed to a method of and apparatus for performing a research task within a searchable database by interchangeably utilizing a multitude of search methodologies including keyword search,

hierarchical search, and dichotomous key search. A search criteria is correlated to a searchable database for generating one or more matching items, wherein each matching item corresponds to a segment of the searchable database, and repeatedly utilizing one of the search methodologies to correlate a subsequent search criteria to one of the matching items for generating one or more subsequent matching items until the research task is completed. Utilizing the search methodologies can be performed by a server, preferably accessible over the internet through the public switched telephone network. According to another aspect, the method utilizes keyword search, hierarchical search, and parametric search methodologies. According to yet another aspect, the method utilizes keyword search, dichotomous key search, and parametric search methodologies. According to still yet another aspect, the method utilizes dichotomous key search, hierarchical search, and parametric search methodologies.

The elements of Claim 1, directed to one embodiment of the present invention, are described in the Specification at page 22, line 12 through page 30 line 4; page 39, line 32 through page 41, line 15 and the accompanying Figures 1, 3, 4, 6 and 7. The method described there is directed to performing a research task within a searchable database (120). The method comprises utilizing a search module (110) to correlate a search criteria to the searchable database (120) for generating one or more matching items (page 29, lines 10-15), wherein each matching item corresponds to a segment of the searchable database (120), further wherein the search module (110) includes a keyword search, a hierarchical search, and a dichotomous key search (page 31, lines 18-23), utilizing the search module (110) to correlate a subsequent search criteria to one of the matching items for generating one or more subsequent matching items (page 29, lines 10-15), wherein each subsequent matching item is a sub-segment of the matching item used to generate the subsequent matching item (page 40, line 16 through page 41, line 15), and further wherein the subsequent search criteria is a selective one of the search criteria and a different search criteria and repeating step (b) until the research task is completed (page 43, line 6 through page 44, line 26) such that each utilization of the search module (110) includes the availability of the keyword search, the hierarchical search, and the dichotomous key search (page 39, lines 32 through page 40, line 6).

The elements of Claim 15, directed to one embodiment of the present invention, are described in the Specification at page 19, lines 7-29; page 22, line 12 through page 30, line 4; page 39, line 32 through page 41, line 15 and the accompanying Figures 1, 3, 4, 6 and 7. The system described there is directed to a research system for performing a research task within a searchable database (120). The system comprises a research server configured to utilize a search

module (110), to correlate a search criteria to the searchable database (120) coupled to the research server for generating one or more matching items (page 29, lines 10-15), wherein each matching item corresponds to a segment of the searchable database (120), further wherein the search module (110) includes a keyword search, a hierarchical search, and a dichotomous key search (page 29, lines 24-29), to utilize the search module (110) to correlate a subsequent search criteria to one of the matching items for generating one or more subsequent matching items (page 29, lines 10-15), wherein each subsequent matching item is a sub-segment of the matching item used to generate the subsequent matching item, further wherein the subsequent search criteria is a selective one of the search criteria and a different search criteria, and to repeat the utilization of the search module (110) to correlate a subsequent search criteria to one of the matching items for generating one or more subsequent matching items (page 40, line 16 through page 41, line 15), wherein each subsequent matching item is a sub-segment of the matching item used to generate the subsequent matching item, further wherein the subsequent search criteria is a selective one of the search criteria and a different search criteria, until the research task is completed (page 40, line 16 through page 41, line 15) and further wherein each utilization of the search module (110) includes the availability of the keyword search, the hierarchical search, and the dichotomous key search (page 39 line 32 through page 40, line 6).

The elements of Claim 49, directed to one embodiment of the present invention, are described in the Specification at page 22, line 12 through page 30 line 4; page 39, line 32 through page 41, line 15 and the accompanying Figures 1, 3, 5, 6 and 7. The method described there is directed to a method of performing a research task within a searchable database (120). The method comprises utilizing a search module (110) to correlate a search criteria to the searchable database (120) for generating one or more matching items (page 29, lines 10-15), wherein each matching item corresponds to a segment of the searchable database (120), further wherein the search module (110) includes a keyword search, a dichotomous key search, and a parametric search (page 29, lines 24-29), utilizing the search module (110) to correlate a subsequent search criteria to one of the matching items for generating one or more subsequent matching items (page 29, lines 10-15), wherein each subsequent matching item is a sub-segment of the matching item used to generate the subsequent matching item (page 40, line 16 through page 41, line 15), and further wherein the subsequent search criteria is a selective one of the search criteria and a different search criteria (page 40, line 16 through page 41, line 15) and repeating step (b) until

the research task is completed such that each utilization of the search module (110) includes the availability of the keyword search, the dichotomous key search, and the parametric search (page 39, lines 32 through page 40, line 6).

The elements of Claim 63, directed to one embodiment of the present invention, are described in the Specification at page 19, lines 7-29; page 22, line 12 through page 30, line 4; page 39, line 32 through page 41, line 15 and the accompanying Figures 1, 3, 5, 6 and 7. The research system described there is directed to a research system for performing a research task within a searchable database (120). The research system comprises a research server configured to utilize a search module (110) to correlate a search criteria to the searchable database (120) coupled to the research server for generating one or more matching items (page 29, lines 10-15), wherein each matching item corresponds to a segment of the searchable database (120), further wherein the search module (110) includes a keyword search, a dichotomous key search, and a parametric search (page 29, lines 24-29), to utilize the search module (110) to correlate a subsequent search criteria to one of the matching items for generating one or more subsequent matching items (page 29, lines 10-15), wherein each subsequent matching item is a sub-segment of the matching item used to generate the subsequent matching item (page 40, line 16 through page 41, line 15), further wherein the subsequent search criteria is a selective one of the search criteria and a different search criteria, and to repeat the utilization of the search module (110) to correlate a subsequent search criteria to one of the matching items for generating one or more subsequent matching items, wherein each subsequent matching item is a sub-segment of the matching item used to generate the subsequent matching item (page 40, line 16 through page 41, line 15), and further wherein the subsequent search criteria is a selective one of the search criteria and a different search criteria, until the research task is completed, and further wherein each utilization of the search module (110) includes the availability of the keyword search, the dichotomous key search, and the parametric search (page 39, lines 32 through page 40, line 6).

The elements of Claim 73, directed to one embodiment of the present invention, are described in the Specification at page 22, line 12 through page 30 line 4; page 39, line 32 through page 41, line 15 and the accompanying Figures 1, 4, 5, 6 and 7. The method described there is directed to a method of performing a research task within a searchable database (120). The method comprises utilizing a search module (110) to correlate a search criteria to the searchable database (120) for generating one or more matching items (page 29, lines 10-15), wherein each matching item corresponds to a segment of the searchable database (120), further wherein the search module (110) includes a hierarchical search, a dichotomous key search, and a parametric

search (page 29, lines 24-29), utilizing the search module (110) to correlate a subsequent search criteria to one of the matching items for generating one or more subsequent matching items (page 29, lines 10-15), wherein each subsequent matching item is a sub-segment of the matching item used to generate the subsequent matching item (page 40, line 16 through page 41, line 15), and further wherein the subsequent search criteria is a selective one of the search criteria and a different search criteria and repeating step (b) until the research task is completed such that each utilization of the search module (110) includes the availability of the hierarchical search, the dichotomous key search, and the parametric search (page 39, lines 32 through page 40, line 6).

The elements of Claim 87, directed to one embodiment of the present invention, are described in the Specification at page 19, lines 7-29; page 22, line 12 through page 30, line 4; page 39, line 32 through page 41, line 15 and the accompanying Figures 1, 4, 5, 6 and 7. The research system described there is directed to a research system of performing a research task within a searchable database (120). The research system comprises a research server configured to utilize a search module (110) to correlate a search criteria to the searchable database (120) coupled to the research server for generating one or more matching items (page 29, lines 10-15), wherein each matching item corresponds to a segment of the searchable database (120), further wherein the search module (110) includes a hierarchical search, a dichotomous key search, and a parametric search (page 29, lines 24-29), to utilize the search module (110) to correlate a subsequent search criteria to one of the matching items for generating one or more subsequent matching items, wherein each subsequent matching item is a sub-segment of the matching item used to generate the subsequent matching item (page 40, line 16 through page 41, line 15), further wherein the subsequent search criteria is a selective one of the search criteria and a different search criteria, and to repeat the utilization of the search module (110) to correlate a subsequent search criteria to one of the matching items for generating one or more subsequent matching items, wherein each subsequent matching item is a sub-segment of the matching item used to generate the subsequent matching item (page 40, line 16 through page 41, line 15), and further wherein the subsequent search criteria is a selective one of the search criteria and a different search criteria, until the research task is completed, and further wherein each utilization of the search module (110) includes the availability of the hierarchical search, the dichotomous key search, and the parametric search (page 39, lines 32 through page 40, line 6).

**VI. GROUND OF REJECTION AND OTHER MATTERS TO BE REVIEWED ON APPEAL**

The following issues are presented in this Appeal Brief for review by the Board of Patent Appeals and Interferences:

1. Whether Claims 1, 4-15, 17-24, 49, 52-63, 65-73, 76-87 and 89-96 are properly rejected under 35 U.S.C. § 103 as being unpatentable over Witek in view of Botto.

**VII. ARGUMENT**

*Grounds for Rejection*

Within the Office Action of May 13, 2005, Claims 1, 4-15, 17-24, 49, 52-63, 65-73, 76-87 and 89-96 have been rejected under 35 U.S.C. § 103 as being unpatentable over Witek in view of Botto.

*Outline of Arguments*

In the discussion that follows, the Applicant first discusses the teachings of Witek. The Applicant then discusses the teachings of Botto. The Applicant then discusses the impropriety of the combination of Witek and Botto. The Applicant then discusses the teachings of Witek combined with Botto. The Applicant then analyzes the pending claims and their limitations and explains why Witek, Botto and their combination do not teach the claimed invention.

1. Witek does not teach dichotomous key search. Witek does not teach performing a search in which for any given searching step, at any location within the database, three or more different search methodologies are available to be used to perform the search. Specifically, Witek does not teach that three or more of any of a keyword search, hierarchical search, dichotomous key search and parametric search can be used at any location within the database.

Witek teaches a system and method for providing classified ads over the Internet. Internet users can connect to a newspaper web server and central web application server to search for and obtain classified ads. Ad records are stored in ad database servers 20 for providing classified ad records on request to application servers 16. To search the ad records, the search process is divided into two principle parts. The first part includes a system entry and pre-



selection sequence, and the second part includes a record selection sequence. [Witek, col. 12, lines 10-13] More specifically, in the first part the user enters the system and specifies the category of classified ads to be searched. Thereafter, as the user navigates to the respective selected category, the user further specifies a subcategory for the particular category selected. [Witek, col. 12, lines 27-37] The selected category and subcategory pair is identified by a category/subcategory ID 46. The specific parameters are entered as primary selection parameters 60 and as secondary selection parameters 62. The first part of the search process is limited to performing searches based on category, or in other words a hierarchical search. [Witek, col. 13, lines 30-46] During this first *utilization* of the search system of Witek, the user is *only* able to specify a category and subcategory pair. The second part of the search process is limited to performing searches based on entered parameters, in other words a keyword search or parametric search. During this second *utilization* of the search system of Witek, the user is *only* able to perform searches based on entered parameters.

As discussed above, Witek teaches that the user first navigates through the system and specifies a category and subcategory to narrow down the number of records to search. [Witek, col. 12, lines 27-37] According to the teachings of Witek, during this first part of the search process, only the category and subcategory search methodologies are available. No other search methodologies are available during the first part of the search process. Witek then teaches that the second part of the search process includes entering a formal record selection query containing the specific parameters for the ad records the user wishes to see. [Witek, col. 17, lines 42-50] No other search methodologies are available during the second part of the search process. Witek does not teach that during the first part or the second part of the search process, each of the search methodologies are available. Accordingly, Witek does not teach that each utilization of the search module includes the availability of all types of available searches.

As recognized within the Office Action of May 13, 2005, Witek does not teach a dichotomous key search. Witek does not teach performing a search in which for any given searching step, at any location within the database, three or more different search methodologies are available to be used to perform the search. Specifically, Witek does not teach that three or more of any of a keyword search, hierarchical search, dichotomous key search and parametric search can be used at any location within the database. As discussed above, Witek teaches that during the first part of the search process only the category and subcategory methodologies are available and during the second part of the search process only searches based on entered parameters are available.

2. Botto does not teach performing a search in which for any given searching step, at any location within the database, four different search methodologies are available to be used to perform the search.

Botto teaches a transmission system and modem utilizing coded modulation. Botto appears to be cited because of its teaching of a zone searching module which determines a searched zone by dichotomy. Botto also does not teach performing a search in which for any given searching step, at any location within the database, four different search methodologies are available to be used to perform the search.

Furthermore, the zone search taught in Botto is completely different from the dichotomous search claimed in the present invention. Botto, teaches the zone search receiving only one input, R, having coordinates  $X_r'$  and  $Y_r'$ , and then traversing through a number of binary forks using that same singular input to determine the path. [Botto, col. 4, lines 19-28] The zone searching module determines the reference zone quadrant to which R belongs by dichotomy according to the algorithm of Fig. 5. [Botto, col. 5, lines 26-28] The algorithm has set values to compare with the input value and ultimately reaches the desired zone. [Botto, col. 5, lines 30-38] However, the dichotomous search of the present invention requires multiple inputs generally to reach the desired destination although each are input separately as a user traverses through the tree. Using an example of the present invention, a user would have to answer a series of questions, by inputting data multiple times, to complete the sequence, "Everything → Organic → Vegetable → Plant → Tree → Evergreen → Tuber-Leaf → Juniper". [Present Invention, Specification, page 29, line 27] The series of questions would be along the lines of "Organic or Inorganic?...Vegetable or fruit?...etc." Based on each individual answer, to each individual question, the user would traverse down the path accordingly. On the other hand, Botto only receives one input and then based on that one input from a processing module, not a user, traverses through its entire structure depending on how that one input compares to pre-set comparators. It is impossible to go from "Everything" to "Juniper" with only one input unless you know what you are searching for is "Juniper" from the beginning, and then a user might as well use a different search such as a keyword search. Perhaps a more clear example is when a person has symptoms for a disease, but is not sure what the ultimate disease is. The user would answer a series of questions and ultimately arrive at whatever the disease is. This is not possible using the teachings of Botto. The point of the dichotomous search is to allow a user to navigate from general topics like "Organic" and "Fever" to more specific topics such as "Juniper" and

“Flu” in multiple steps. Such a search cannot be performed with the zone searching module taught in Botto.

3. The combination of Witek and Botto is improper.

There is no motivation to warrant the combination of Witek and Botto. There is no hint, teaching or suggestion in either of Witek or Botto to warrant their combination.

This is a classic case of impermissibly using hindsight to make a rejection based on obviousness. The Court of Appeals for the Federal Circuit has stated that “it is impermissible to use the claimed invention as an instruction manual or ‘template’ to piece together the teachings of the prior art so that the claimed invention is rendered obvious.” In Re Fritch, 972 F.2d, 1260, 1266, 23 USPQ2d 1780, 1784 (Fed. Cir. 1992). As discussed above, Witek and Botto do not teach performing a search in which for any given searching step, at any location within the database, three or more different search methodologies are available to be used to perform the search, as claimed. As recognized within the Office Action of May 13, 2005, Witek does not teach a dichotomous key search. Botto does teach a zone searching module which determines a searched zone by dichotomy. Within the Office Action of May 13, 2005, it is stated that

[i]t would have been obvious to one with ordinary skill in the art at the time the invention was made to apply the teaching of Botto into the invention of Witek because the combination would reduce the memory access when using binary search, and providing user more search methodologies. [Office Action of May 13, 2005, page 4]

It is only with the benefit of the present claims, as a “template” that there is any motivation to combine the data modem of Botto with the classified ad system of Witek. No such motivation can be found in the teachings of either of the references. To conclude that the combination of Witek and Botto is obvious, based on the teachings of these references, is to use hindsight based on the teachings of the present invention and to read much more into Witek and Botto than their actual teachings. This is simply not permissible based on the directive from the Court of Appeals for the Federal Circuit.

It is well settled that to establish a *prima facie* case of obviousness, three basic criteria must be met:

- 1) there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings;
- 2) there must be a reasonable expectation of success; and
- 3) the prior art reference, or references, must teach or suggest all the claim limitations. MPEP § 2143.

The burden of establishing a *prima facie* case of obviousness based on the teachings of Witek and Botto has not been met within the Office Action of May 13, 2005.

There is no motivation to combine the teachings of Botto with Witek. Botto relates to a transmission system and modem utilizing coded modulation. Botto teaches that the zone searching module determines the zone of the reference quadrant by dichotomy according to an algorithm. [Botto, col. 5, lines 26-29] Botto is only cited because it teaches searching by dichotomy. There is no hint, teaching or suggestion in either Botto or Witek to motivate one skilled in the art to combine their teachings. It is only with the benefit of the presently claimed invention as a “template” that one would consider combining the dichotomous search of Botto with the classified ad system of Witek.

According to In re Grasselli, 713 F.2d 731, 743, (Fed. Cir. 1983), it is improper to combine references where the references teach away from their combination. Witek as described above teaches a system and method so Internet users can connect to a newspaper web server and central web application server to search for and obtain classified ads. To search the ad records, the search process is divided into two principle parts. The first part includes a system entry and pre-selection sequence, and the second part includes a record selection sequence. [Witek, col. 12, lines 10-13] More specifically, in the first part the user enters the system and specifies the category of classified ads to be searched. Thereafter, as the user navigates to the respective selected category, the user further specifies a subcategory for the particular category selected. Hence, a user enters multiple inputs to ultimately find the ad for which she is searching. Botto, however, teaches only one input, R, having coordinates,  $Xr'$  and  $Yr'$ . [Botto, col. 4, lines 19-28] The zone searching module determines the reference zone quadrant to which R belongs by dichotomy according to the algorithm of Fig. 5. [Botto, col. 5, lines 26-28 and Fig. 5] The algorithm has set values to compare the input value with and ultimately reaches the desired zone. [Botto, col. 5, lines 30-38] Hence, it is improper to combine these references as they are utilized

in completely different manners. Witek requires a user to continue searching by inputting multiple search data in first and second parts to narrow down the search; whereas, Botto takes only one input and uses an algorithm to reach an end point. Witek and Botto teach away from each other and should not have been combined.

Furthermore, “[t]he test for an implicit showing [of a teaching, suggestion or motivation] is what the combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art.” In re Kotzab, 217 F.3d 1365, 1370 (Fed. Cir. 2000). Moreover, “particular findings must be made as to the reason the skilled artisan, with no knowledge of the claimed invention, would have selected these components for combination in the manner claimed.” Kotzab at 1371.

Within In re Kotzab, the claims focused on an injection molding method using a single temperature sensor to control a plurality of flow control valves. The reference taught a multizone device having multiple sensors, each of which controlled an associated flow control valve, and also taught that one system may be used to control a number of valves. The court found there insufficient evidence to show that one sensor was the same as one system. Although the control of multiple valves by a single sensor rather than by multiple sensors was a “technologically simple concept,” there was no finding “as to the specific understanding or principle within the knowledge of the skilled artisan” that would have provided the motivation to use a single sensor as the system to control more than one valve. Kotzab at 1371.

In the present case, as in Kotzab, there are no showings of particular findings that a skilled artisan, with no knowledge of the claimed invention, would have selected the components from Witek and Botto for combination in the manner claimed. As discussed above, Witek teaches a system and method in which Internet users can connect to a newspaper web server and central web application server to search for and obtain classified ads. Witek implements specified search methods but does not implement a dichotomous search. Botto is directed to the internal mechanism of a modem for determining a zone by using a form of a search by dichotomy. Botto never hints or suggests using the search with a web server. A modem is not used interchangeably with a web server. This is comparable to the court in Kotzab rejecting the argument that one sensor was the same as one system and stating that there was no finding as to a specific understanding or principle that would have provided the motivation to use a single sensor as a system to control more than one valve. The court did not allow a system to be interchanged with a sensor nor should the present Board allow a modem to be interchanged with a web server. To conclude that this is obvious based on the teachings of these references, is to

use hindsight based on the teachings of the present invention and to read much more into Witek and Botto than their actual teachings.

Even if considered proper, the combination of Witek and Botto does not teach performing a search in which for any given searching step, at any location within the database, three or more different search methodologies are available to be used to perform the search. Neither, Witek, Botto nor their combination teach that each utilization of the search modules includes the availability of three or more of the keyword search, the hierarchical search, the dichotomous key search and the parametric search. Botto only teaches dichotomy and Witek teaches that only category and subcategory are determined in the first part and only searches based on entered parameters are available in the second part.

In contrast to the teachings of Witek and Botto, the method of and apparatus for performing a research task of the present invention, interchangeably utilizes a multitude of search methodologies. Specifically, utilizing a search module, a user is able to selectively utilize one or more search methodologies including keyword search, hierarchical search, dichotomous key search and parametric search to correlate a search criteria to a searchable database for generating one or more matching items. It is further taught within the present specification that

[a]t each node within the tree, the user is presented with the option of using any one or combinations of the four search methodologies utilized by the research system. The four search methodologies are keyword search, hierarchical tree search, dichotomous key search, and parametric search. Regardless as to which search methodology or search methodologies are used to reach a particular node, the user can utilize any of the four search methodologies to further refine the search and move further down the directory tree structure. The user may also navigate back up the directory tree structure to a higher node, and once again have the option to use any of the four search methodologies to refine the search from the current node and move further down the directory tree structure.  
[Present Specification, page 39, line 32 page 40, line 8].

Therefore, a user is able to navigate the directory tree structure, utilizing any one of the search methodologies in any combination to reach the desired result. As discussed above, neither Witek, Botto nor their combination teach that each utilization of the search module includes the availability of the keyword search, the hierarchical search, the dichotomous key search and the parametric search.

Within the Response to Arguments section of the Office Action of May 13, 2005, it is stated that

Applicant also does not clearly claim “at any step location within the database, three or more different methodologies are available to be used to perform the search.” Instead, Applicant only claims that “wherein each utilization of the search module includes the availability of each search.” Therefore, if the Witek discloses one of the methods and the method is available for the search process, then the Witek still can apply to the invention. [Office Action of May 13, 2005, pages 6 and 7]

The Applicant respectfully disagrees. It is specified within the claims that the search module includes three of a keyword search, a hierarchical search, a dichotomous key search and a parametric search. This limitation requires that *all three* of the specified search capabilities are present within the search module. In order to properly be applied to the claimed invention, the cited reference(s) must teach or make obvious *all three* of the specified search capabilities. It is further specified within the claims that each utilization of the search module includes the availability of the three or more specified searches. Utilization is defined as “to put to use for a certain purpose.” [The American Heritage Dictionary] Just as taught within the specification, the limitation that each utilization of the search module includes the availability of the three or more specified searches, specifies that *every time* the search module is used, each of the three or more specified search capabilities (three of: keyword search, hierarchical search, dichotomous key search and parametric search) are available. Neither Witek, Botto nor their combination teach such a search module. As discussed above, neither Witek, Botto nor their combination teach that each utilization of the search module includes the availability of three or more of the keyword search, the hierarchical search, the dichotomous key search and the parametric search.

4. The claims distinguish over Witek, Botto and their combination.

The claims are grouped separately below to indicate that they do not stand or fall together.

a.     Claims 1 and 4-14

The independent Claim 1 is directed to a method of performing a research task within a searchable database. The method of Claim 1 comprises the steps of utilizing a search module to correlate a search criteria to the searchable database for generating one or more matching items, wherein each matching item corresponds to a segment of the searchable database, further wherein the search module includes a keyword search, a hierarchical search, and a dichotomous key search, utilizing the search module to correlate a subsequent search criteria to one of the matching items for generating one or more subsequent matching items, wherein each subsequent matching item is a sub-segment of the matching item used to generate the subsequent matching item, and further wherein the subsequent search criteria is a selective one of the search criteria and a different search criteria, and repeating utilizing the search module to correlate a subsequent search criteria until the research task is completed *such that each utilization of the search module includes the availability of the keyword search, the hierarchical search, and the dichotomous key search*. As described above, the combination of Witek and Botto is not proper. As further discussed above, even if considered proper, neither Witek, Botto nor their combination teach that each utilization of the search module includes the availability of the keyword search, the hierarchical search and the dichotomous key search. Botto only teaches dichotomy. Witek teaches that only category and subcategory are determined in the first part and only searches based on entered parameters are available in the second part. For at least these reasons the independent Claim 1 is allowable over the teachings of Witek, Botto and their combination.

Claims 4-14 depend on the independent Claim 1. As described above, the independent Claim 1 is allowable over the teachings of Witek, Botto and their combination. Accordingly, Claims 4-14 are all also allowable as being dependent on an allowable base claim.

b.     Claims 15 and 17-24

The independent Claim 15 is directed to research system for performing a research task within a searchable database. The research system of Claim 15 comprises a research server configured to utilize a search module, to correlate a search criteria to the searchable database coupled to the research server for generating one or more matching items, wherein each matching item corresponds to a segment of the searchable database, further wherein the search module includes a keyword search, a hierarchical search, and a dichotomous key search, to utilize the



search module to correlate a subsequent search criteria to one of the matching items for generating one or more subsequent matching items, wherein each subsequent matching item is a sub-segment of the matching item used to generate the subsequent matching item, further wherein the subsequent search criteria is a selective one of the search criteria and a different search criteria, and to repeat the utilization of the search module to correlate a subsequent search criteria to one of the matching items for generating one or more subsequent matching items, wherein each subsequent matching item is a sub-segment of the matching item used to generate the subsequent matching item, further wherein the subsequent search criteria is a selective one of the search criteria and a different search criteria, until the research task is completed, and further wherein *each utilization of the search module includes the availability of the keyword search, the hierarchical search, and the dichotomous key search*. As described above, the combination of Witek and Botto is not proper. As further discussed above, even if considered proper, neither Witek, Botto nor their combination teach that each utilization of the search module includes the availability of the keyword search, the hierarchical search and the dichotomous key search. Botto only teaches dichotomy. Witek teaches that only category and subcategory are determined in the first part and only searches based on entered parameters are available in the second part. For at least these reasons, the independent Claim 15 is allowable over the teachings of Witek, Botto and their combination.

Claims 17-24 depend on the independent Claim 15. As described above, the independent Claim 15 is allowable over the teachings of Witek, Botto and their combination. Accordingly, Claims 17-24 are all also allowable as being dependent on an allowable base claim.

c.     Claims 49 and 52-62

The independent Claim 49 is directed to method of performing a research task within a searchable database. The method of Claim 49 comprises the steps of utilizing a search module to correlate a search criteria to the searchable database for generating one or more matching items, wherein each matching item corresponds to a segment of the searchable database, further wherein the search module includes a keyword search, a dichotomous key search, and a parametric search, utilizing the search module to correlate a subsequent search criteria to one of the matching items for generating one or more subsequent matching items, wherein each subsequent matching item is a sub-segment of the matching item used to generate the subsequent matching item, and further wherein the subsequent search criteria is a selective one of the search criteria

and a different search criteria, and repeating the step of utilizing the search module to correlate a subsequent search criteria until the research task is completed *such that each utilization of the search module includes the availability of the keyword search, the dichotomous key search, and the parametric search*. As described above, the combination of Witek and Botto is not proper. As further discussed above, even if considered proper, neither Witek, Botto nor their combination teach that each utilization of the search module includes the availability of the keyword search, the dichotomous key search, and the parametric search. Botto only teaches dichotomy. Witek teaches that only category and subcategory are determined in the first part and only searches based on entered parameters are available in the second part. For at least these reasons, the independent Claim 49 is allowable over the teachings of Witek, Botto and their combination.

Claims 52-62 depend on the independent Claim 49. As described above, the independent Claim 49 is allowable over the teachings of Witek, Botto and their combination. Accordingly, Claims 52-62 are all also allowable as being dependent on an allowable base claim.

d. Claims 63 and 65-72

The independent Claim 63 is directed to a research system for performing a research task within a searchable database. The research system of Claim 63 comprises a research server configured to utilize a search module to correlate a search criteria to the searchable database coupled to the research server for generating one or more matching items, wherein each matching item corresponds to a segment of the searchable database, further wherein the search module includes a keyword search, a dichotomous key search, and a parametric search, to utilize the search module to correlate a subsequent search criteria to one of the matching items for generating one or more subsequent matching items, wherein each subsequent matching item is a sub-segment of the matching item used to generate the subsequent matching item, further wherein the subsequent search criteria is a selective one of the search criteria and a different search criteria, and to repeat the utilization of the search module to correlate a subsequent search criteria to one of the matching items for generating one or more subsequent matching items, wherein each subsequent matching item is a sub-segment of the matching item used to generate the subsequent matching item, and further wherein the subsequent search criteria is a selective one of the search criteria and a different search criteria, until the research task is completed, and further wherein *each utilization of the search module includes the availability of the keyword*

*search, the dichotomous key search, and the parametric search.* As described above, the combination of Witek and Botto is not proper. As further discussed above, even if considered proper, neither Witek, Botto nor their combination teach that each utilization of the search module includes the availability of the keyword search, the dichotomous key search, and the parametric search. Botto only teaches dichotomy. Witek teaches that only category and subcategory are determined in the first part and only searches based on entered parameters are available in the second part. For at least these reasons, the independent Claim 63 is allowable over the teachings of Witek, Botto and their combination.

Claims 65-72 depend on the independent Claim 63. As described above, the independent Claim 63 is allowable over the teachings of Witek, Botto and their combination. Accordingly, Claims 65-72 are all also allowable as being dependent on an allowable base claim.

e.     Claims 73 and 76-86

The independent Claim 73 is directed to a method of performing a research task within a searchable database. The method of Claim 73 comprises the steps of utilizing a search module to correlate a search criteria to the searchable database for generating one or more matching items, wherein each matching item corresponds to a segment of the searchable database, further wherein the search module includes a hierarchical search, a dichotomous key search, and a parametric search, utilizing the search module to correlate a subsequent search criteria to one of the matching items for generating one or more subsequent matching items, wherein each subsequent matching item is a sub-segment of the matching item used to generate the subsequent matching item, and further wherein the subsequent search criteria is a selective one of the search criteria and a different search criteria, and repeating the step of utilizing the search module to correlate a subsequent search criteria until the research task is completed *such that each utilization of the search module includes the availability of the hierarchical search, the dichotomous key search, and the parametric search.* As described above, the combination of Witek and Botto is not proper. As further discussed above, even if considered proper, neither Witek, Botto nor their combination teach that each utilization of the search module includes the availability of the hierarchical search, the dichotomous key search, and the parametric search. Botto only teaches dichotomy. Witek teaches that only category and subcategory are determined in the first part and only searches based on entered parameters are available in the second part. For at least these

reasons the independent Claim 73 is allowable over the teachings of Witek, Botto and their combination.

Claims 76-86 depend on the independent Claim 73. As described above, the independent Claim 73 is allowable over the teachings of Witek, Botto and their combination. Accordingly, Claims 76-86 are all also allowable as being dependent on an allowable base claim.

f. Claims 87 and 89-96

The independent Claim 87 is directed to a research system for performing a research task within a searchable database. The research system of Claim 87 comprises a research server configured to utilize a search module to correlate a search criteria to the searchable database coupled to the research server for generating one or more matching items, wherein each matching item corresponds to a segment of the searchable database, further wherein the search module includes a hierarchical search, a dichotomous key search, and a parametric search, to utilize the search module to correlate a subsequent search criteria to one of the matching items for generating one or more subsequent matching items, wherein each subsequent matching item is a sub-segment of the matching item used to generate the subsequent matching item, further wherein the subsequent search criteria is a selective one of the search criteria and a different search criteria, and to repeat the utilization of the search module to correlate a subsequent search criteria to one of the matching items for generating one or more subsequent matching items, wherein each subsequent matching item is a sub-segment of the matching item used to generate the subsequent matching item, and further wherein the subsequent search criteria is a selective one of the search criteria and a different search criteria, until the research task is completed, and further wherein *each utilization of the search module includes the availability of the hierarchical search, the dichotomous key search, and the parametric search*. As described above, the combination of Witek and Botto is not proper. As further discussed above, even if considered proper, neither Witek, Botto nor their combination teach that each utilization of the search module includes the availability of the hierarchical search, the dichotomous key search, and the parametric search. Botto only teaches dichotomy. Witek teaches that only category and subcategory are determined in the first part and only searches based on entered parameters are available in the second part. For at least these reasons the independent Claim 87 is allowable over the teachings of Witek, Botto and their combination.

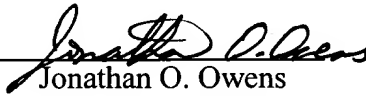
Claims 89-96 depend on the independent Claim 87. As described above, the independent Claim 87 is allowable over the teachings of Witek, Botto and their combination. Accordingly, Claims 89-96 are all also allowable as being dependent on an allowable base claim.

4. CONCLUSION

For the above reasons, it is respectfully submitted that the Claims 1, 4-15, 17-24, 49, 52-63, 65-73, 76-87 and 89-96 are allowable over the cited prior art references. Therefore, a favorable indication is respectfully requested.

Respectfully submitted,  
HAVERSTOCK & OWENS LLP

Dated: October 6, 2005

By:   
Jonathan O. Owens  
Reg. No.: 37,902  
Attorneys for Applicants



**VIII. CLAIMS APPENDIX**

This appendix includes a list of the claims under appeal.

1. A method of performing a research task within a searchable database comprising the steps of:
  - a. utilizing a search module to correlate a search criteria to the searchable database for generating one or more matching items, wherein each matching item corresponds to a segment of the searchable database, further wherein the search module includes a keyword search, a hierarchical search, and a dichotomous key search;
  - b. utilizing the search module to correlate a subsequent search criteria to one of the matching items for generating one or more subsequent matching items, wherein each subsequent matching item is a sub-segment of the matching item used to generate the subsequent matching item, and further wherein the subsequent search criteria is a selective one of the search criteria and a different search criteria; and
  - c. repeating step (b) until the research task is completed such that each utilization of the search module includes the availability of the keyword search, the hierarchical search, and the dichotomous key search.
2. (canceled)
3. (canceled)
4. The method as claimed in claim 1 wherein when the utilized search methodology is the keyword search, the search criteria is one or more keywords input by a user.
5. The method as claimed in claim 1 wherein when the utilized search methodology is the hierarchical search, the search criteria is a selected one of a list of one or more directory items.
6. The method as claimed in claim 1 wherein when the utilized search methodology is the dichotomous key search, the search criteria is a selected one of two binary items.

7. The method as claimed in claim 1 wherein the searchable database is distributed into more than one physical location.
8. The method as claimed in claim 1 wherein the steps of utilizing the search methodologies are performed by a server.
9. The method as claimed in claim 8 further comprising the step of establishing an internet connection with the server to utilize the search methodologies.
10. The method as claimed in claim 9 wherein the internet connection is established with a computer system at a remote location from the server.
11. The method as claimed in claim 1 wherein the searchable database is formatted in a directory tree structure, and further wherein the directory tree structure includes nodes comprising a collection of related data and branches comprising links between the nodes.
12. The method as claimed in claim 11 wherein the collection of related data for a particular node is displayed in an encyclopedia-like format, wherein the encyclopedia-like format includes text, graphics, and links to related topics.
13. The method as claimed in claim 11 further comprising the step of maintaining the node by appropriately adding and deleting data to and from the node.
14. The method as claimed in claim 13 wherein the step of maintaining the node is performed by a node owner who maintains the node and all nodes that are linked beneath the corresponding node within the directory tree structure.
15. A research system for performing a research task within a searchable database comprising a research server configured to utilize a search module, to correlate a search criteria to the searchable database coupled to the research server for generating one or more matching items, wherein each matching item corresponds to a segment of the searchable database, further wherein the search module includes a keyword search, a hierarchical search, and a dichotomous key search, to utilize the search module to correlate a subsequent search criteria to one of the

matching items for generating one or more subsequent matching items, wherein each subsequent matching item is a sub-segment of the matching item used to generate the subsequent matching item, further wherein the subsequent search criteria is a selective one of the search criteria and a different search criteria, and to repeat the utilization of the search module to correlate a subsequent search criteria to one of the matching items for generating one or more subsequent matching items, wherein each subsequent matching item is a sub-segment of the matching item used to generate the subsequent matching item, further wherein the subsequent search criteria is a selective one of the search criteria and a different search criteria, until the research task is completed, and further wherein each utilization of the search module includes the availability of the keyword search, the hierarchical search, and the dichotomous key search.

16. (canceled)

17. The research system as claimed in claim 15 further comprising an interface circuit coupled to the research server to establish a connection with a computer system.

18. The research system as claimed in claim 17 wherein the connection is established with the computer system at a remote location from the interface circuit.

19. The research system as claimed in claim 18 wherein the connection is established with the remote computer system and the interface circuit over the internet to allow users to access the research system and to utilize the search methodologies to perform the research task.

20. The research system as claimed in 15 wherein the searchable database is distributed into more than one physical location.

21. The research system as claimed in 15 wherein the searchable database is formatted in a directory tree structure, and further wherein the directory tree structure includes nodes comprising a collection of related data and branches comprising links between the nodes.

22. The research system as claimed in 21 wherein the collection of related data for a particular node is displayed in an encyclopedia-like format, wherein the encyclopedia-like format includes text, graphics, and links to related topics.



23. The research system as claimed in 21 further comprising a node owner for maintaining the node by appropriately adding and deleting related data to and from the node.

24. The research system as claimed in 23 wherein the node owner maintains the corresponding node and all nodes that are linked beneath the corresponding node within the directory tree structure.

25. (canceled)

26. (canceled)

27. (canceled)

28. (canceled)

29. (canceled)

30. (canceled)

31. (canceled)

32. (canceled)

33. (canceled)

34. (canceled)

35. (canceled)

36. (canceled)

37. (canceled)

38. (canceled)

39. (canceled)

40. (canceled)

41. (canceled)

42. (canceled)

43. (canceled)

44. (canceled)

45. (canceled)

46. (canceled)

47. (canceled)

48. (canceled)

49. A method of performing a research task within a searchable database comprising the steps of:

- a. utilizing a search module to correlate a search criteria to the searchable database for generating one or more matching items, wherein each matching item corresponds to a segment of the searchable database, further wherein the search module includes a keyword search, a dichotomous key search, and a parametric search;
- b. utilizing the search module to correlate a subsequent search criteria to one of the matching items for generating one or more subsequent matching items, wherein each subsequent matching item is a sub-segment of the matching item used to

- generate the subsequent matching item, and further wherein the subsequent search criteria is a selective one of the search criteria and a different search criteria; and
- c. repeating step (b) until the research task is completed such that each utilization of the search module includes the availability of the keyword search, the dichotomous key search, and the parametric search.

50. (canceled)

51. (canceled)

52. The method as claimed in claim 49 wherein when the utilized search methodology is the dichotomous key search, the search criteria is a selected one of two binary items.

53. The method as claimed in claim 49 wherein when the utilized search methodology is the parametric search, the search criteria is one or more set parameters, and further wherein the parameters are set by a user.

54. The method as claimed in claim 49 wherein when the utilized search methodology is the keyword search, the search criteria is one or more keywords input by a user.

55. The method as claimed in claim 49 wherein the searchable database is distributed into more than one physical location.

56. The method as claimed in claim 49 wherein the steps of utilizing the search methodologies are performed by a server.

57. The method as claimed in claim 49 further comprising the step of establishing an internet connection with the server to utilize the search methodologies.

58. The method as claimed in claim 57 wherein the internet connection is established with a computer system at a remote location from the server.

59. The method as claimed in claim 49 wherein the searchable database is formatted in a directory tree structure, and further wherein the directory tree structure includes nodes comprising a collection of related data and branches comprising links between the nodes.
60. The method as claimed in claim 59 wherein the collection of related data for a particular node is displayed in an encyclopedia-like format, wherein the encyclopedia-like format includes text, graphics, and links to related topics.
61. The method as claimed in claim 59 further comprising the step of maintaining the node by appropriately adding and deleting data to and from the node.
62. The method as claimed in claim 61 wherein the step of maintaining the node is performed by a node owner who maintains the corresponding node and all nodes that are linked beneath the corresponding node within the directory tree structure.
63. A research system for performing a research task within a searchable database comprising a research server configured to utilize a search module to correlate a search criteria to the searchable database coupled to the research server for generating one or more matching items, wherein each matching item corresponds to a segment of the searchable database, further wherein the search module includes a keyword search, a dichotomous key search, and a parametric search, to utilize the search module to correlate a subsequent search criteria to one of the matching items for generating one or more subsequent matching items, wherein each subsequent matching item is a sub-segment of the matching item used to generate the subsequent matching item, further wherein the subsequent search criteria is a selective one of the search criteria and a different search criteria, and to repeat the utilization of the search module to correlate a subsequent search criteria to one of the matching items for generating one or more subsequent matching items, wherein each subsequent matching item is a sub-segment of the matching item used to generate the subsequent matching item, and further wherein the subsequent search criteria is a selective one of the search criteria and a different search criteria, until the research task is completed, and further wherein each utilization of the search module includes the availability of the keyword search, the dichotomous key search, and the parametric search.
64. (canceled)

65. The research system as claimed in claim 63 further comprising an interface circuit coupled to the research server to establish a connection with a computer system.

66. The research system as claimed in claim 65 wherein the connection is established with the computer system at a remote location from the interface circuit.

67. The research system as claimed in claim 66 wherein the connection is established with the remote computer system and the interface circuit over the internet to allow users to access the research system and to utilize the search methodologies to perform the research task.

68. The research system as claimed in 63 wherein the searchable database is distributed into more than one physical location.

69. The research system as claimed in 63 wherein the searchable database is formatted in a directory tree structure, and further wherein the directory tree structure includes nodes comprising a collection of related data and branches comprising links between the nodes.

70. The research system as claimed in 69 wherein the collection of related data for a particular node is displayed in an encyclopedia-like format, wherein the encyclopedia-like format includes text, graphics, and links to related topics.

71 The research system as claimed in 69 further comprising a node owner for maintaining the node by appropriately adding and deleting related data to and from the node.

72. The research system as claimed in 71 wherein the node owner maintains the corresponding node and all nodes that are linked beneath the corresponding node within the directory tree structure.

73. A method of performing a research task within a searchable database comprising the steps of:

- a. utilizing a search module to correlate a search criteria to the searchable database for generating one or more matching items, wherein each matching item corresponds to a segment of the searchable database, further wherein the search

module includes a hierarchical search, a dichotomous key search, and a parametric search;

- b. utilizing the search module to correlate a subsequent search criteria to one of the matching items for generating one or more subsequent matching items, wherein each subsequent matching item is a sub-segment of the matching item used to generate the subsequent matching item, and further wherein the subsequent search criteria is a selective one of the search criteria and a different search criteria; and
- c. repeating step (b) until the research task is completed such that each utilization of the search module includes the availability of the hierarchical search, the dichotomous key search, and the parametric search.

74. (canceled)

75. (canceled)

76. The method as claimed in claim 73 wherein when the utilized search methodology is the hierarchical search, the search criteria is a selected one of a list of one or more directory items.

77. The method as claimed in claim 73 wherein when the utilized search methodology is the dichotomous key search, the search criteria is a selected one of two binary items.

78. The method as claimed in claim 73 wherein when the utilized search methodology is the parametric search, the search criteria is one or more set parameters, and further wherein the parameters are set by a user.

79. The method as claimed in claim 73 wherein the searchable database is distributed into more than one physical location.

80. The method as claimed in claim 73 wherein the steps of utilizing the search methodologies are performed by a server.

81. The method as claimed in claim 80 further comprising the step of establishing an internet connection with the server to utilize the search methodologies.

82. The method as claimed in claim 81 wherein the internet connection is established with a computer system at a remote location from the server.

83. The method as claimed in claim 73 wherein the searchable database is formatted in a directory tree structure, and further wherein the directory tree structure includes nodes comprising a collection of related data and branches comprising links between the nodes.

84. The method as claimed in claim 83 wherein the collection of related data for a particular node is displayed in an encyclopedia-like format, wherein the encyclopedia-like format includes text, graphics, and links to related topics.

85. The method as claimed in claim 83 further comprising the step of maintaining the node by appropriately adding and deleting data to and from the node.

86. The method as claimed in claim 85 wherein the step of maintaining the node is performed by a node owner who maintains the node and all nodes that are linked beneath the corresponding node within the directory tree structure.

87. A research system for performing a research task within a searchable database comprising a research server configured to utilize a search module to correlate a search criteria to the searchable database coupled to the research server for generating one or more matching items, wherein each matching item corresponds to a segment of the searchable database, further wherein the search module includes a hierarchical search, a dichotomous key search, and a parametric search, to utilize the search module to correlate a subsequent search criteria to one of the matching items for generating one or more subsequent matching items, wherein each subsequent matching item is a sub-segment of the matching item used to generate the subsequent matching item, further wherein the subsequent search criteria is a selective one of the search criteria and a different search criteria, and to repeat the utilization of the search module to correlate a subsequent search criteria to one of the matching items for generating one or more subsequent matching items, wherein each subsequent matching item is a sub-segment of the matching item used to generate the subsequent matching item, and further wherein the subsequent search criteria is a selective one of the search criteria and a different search criteria, until the research task is

completed, and further wherein each utilization of the search module includes the availability of the hierarchical search, the dichotomous key search, and the parametric search.

88. (canceled)

89. The research system as claimed in claim 88 further comprising an interface circuit coupled to the research server to establish a connection with a computer system.

90. The research system as claimed in claim 89 wherein the connection is established with the computer system at a remote location from the interface circuit.

91. The research system as claimed in claim 90 wherein the connection is established with the remote computer system and the interface circuit over the internet to allow users to access the research system and to utilize the search methodologies to perform the research task.

92. The research system as claimed in 87 wherein the searchable database is distributed into more than one physical location.

93. The research system as claimed in 87 wherein the searchable database is formatted in a directory tree structure, and further wherein the directory tree structure includes nodes comprising a collection of related data and branches comprising links between the nodes.

94. The research system as claimed in 93 wherein the collection of related data for a particular node is displayed in an encyclopedia-like format, wherein the encyclopedia-like format includes text, graphics, and links to related topics.

95. The research system as claimed in 93 further comprising a node owner for maintaining the node by appropriately adding and deleting related data to and from the node.

96. The research system as claimed in 95 wherein the node owner maintains the corresponding node and all nodes that are linked beneath the corresponding node within the directory tree structure.



**IX. EVIDENCE APPENDIX**

**STATEMENT**

Pursuant to 37 C.F.R. § 41.37(c)(1)(ix), the following is a statement setting forth where in the record the evidence of this appendix was entered by the examiner:

<b>Evidence Description:</b>	<b>Where Entered:</b>
U.S. Pat. No. 6,253,188	Office Action mailed March 16, 2004
U.S. Pat. No. 5,604,772	Office Action mailed March 8, 2005
Office Action mailed May 13, 2005	Examiner Office Action

**X. RELATED PROCEEDINGS APPENDIX**

There are no related proceedings.



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/801,138	03/06/2001	Robert Olan Keith JR.	ABREAU-00102	6011

28960 7590 05/13/2005  
HAVERSTOCK & OWENS LLP  
162 NORTH WOLFE ROAD  
SUNNYVALE, CA 94086

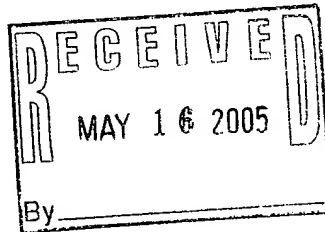
EXAMINER

NGUYEN, CAM LINH T

ART UNIT PAPER NUMBER

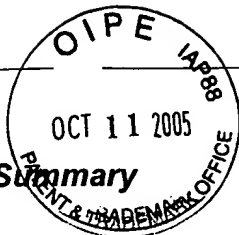
2161

DATE MAILED: 05/13/2005



Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary



Application No.

09/801,138

Applicant(s)

KEITH, ROBERT OLAN

Examiner

CamLinh Nguyen

Art Unit

2161

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 March 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 4 - 15, 17 - 24, 49, 52 - 63, 65 - 73, 76 - 87, and 89 - 96 is/are pending in the application.
- 4a) Of the above claim(s) 2, 3, 16, 25 - 48, 50, 51, 64, 74, 75, and 88 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 4 - 15, 17 - 24, 49, 52 - 63, 65 - 73, 76 - 87, and 89 - 96 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All b) ☐ Some \* c) ☐ None of:
  - 1. ☐ Certified copies of the priority documents have been received.
  - 2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 4/14/05.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Response to Amendment*

1. This Office Action is response to the Amendments filed on 3/28/2005.
2. Applicant's amendments to claims 1 - 96 are acknowledged. Consequently, claims 1, 15, 49, 63, 73, and 87 have been amended; claims 2, 3, 16, 25 - 48, 50, 51, 64, 74, 75, and 88 have been canceled. Accordingly, claims 1, 4 - 15, 17 - 24, 49, 52 - 63, 65 - 73, 76 - 87, and 89 - 96 are currently pending.
3. Applicant's amendments about Double Patenting rejection are acknowledged. Consequently, rejections under Double Patenting are withdrawn.

### *Claim Rejections - 35 USC § 103*

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 4 - 15, 17 - 24, 49, 52 - 63, 65 - 73, 76 - 87, and 89 - 96 are rejected under 35 U.S.C. 103(a) as being unpatentable over Witek et al (U.S. 6,253,188) in view of Botto et al (U.S. 5,604,772).

◆ As per claims 1, 15, 25, 39, 49, 63, 73, 87,

Witek teaches a method of performing a research task within a searchable database comprising:

- "Utilizing a selective one or more search methodologies including keyword search, hierarchical search..." See Fig. 1, 7, 10. In particular:
  - "A search module" corresponds to the search engine that implemented in Fig. 1.

Art Unit: 2161

- “A search criteria” corresponds to arguments or selections that user enters in Fig. 7, element 112.
  - “A searchable database” corresponds to database server (Fig. 1, element 20, col. 9, lines 53 – 55)
  - “One or more matching items” corresponds to the results that sent to user (Fig. 7, element 126 – 128).
  - “The search module includes keyword search” See Fig. 10, element 148, col. 29, lines 28 – 34.
  - “A hierarchical search” corresponds to “category search” because the categories include subcategories that organized in a hierarchical order. See Fig. 4, col. 31, lines 4 – 11.
- “A subsequent search” corresponds to a second or third loop of search based on the result. See col. 12, lines 28 – 43.
  - The Examiner takes Official Notice that it is well known for one skill in the art to implement a search module that includes the availability of each search methodologies. “A search module” must be implemented in Witek invention in order for the system to carry out the processing.

The Examiner takes Official Notice that it is well known for one skill in the art to implement a search module that includes the availability of each search methodologies into the search system. A search module must be implemented in Witek invention in order for the system to carry out the processing.

Art Unit: 2161

The Witek reference fails to disclose the dichotomous key search. However, this method search is a well known in the art. Botto provides an example of it.

Botto teaches that a dichotomous key search is used to search for data in the database 112, wherein the database is a hierarchical database (See Fig. 5, col. 5, lines 26 – 29).

It would have been obvious to one with ordinary skill in the art at the time the invention was made to apply the teaching of Botto into the invention of Witek because the combination would reduce the memory access when using binary search, and providing user more search methodologies.

♦ As per claims 28, 53, 78, the combination of Witek and Botto disclose:

- “The search module further comprises a parametric search capability” See Fig. 10, elements 154, 158, 160, 142, col. 30, lines 10 – 29 of Witek.
- “The utilized search methodology is the parametric search, the search criteria is one or more set parameters, and further wherein the parameters are set by a user” See Fig. 10, elements 154, 158, 160, 142, col. 30, lines 10 – 29 of Witek. As shown in Fig. 10, a user can set the values for parameters such as date, the range price, or number of room.

♦ As per claims 4, 29, 54, the combination of Witek and Botto disclose:

- “The search criteria is one or more keywords input by a user” See Fig. 10, element 148, col. 29, lines 28 – 34 of Witek.

♦ As per claims 5, 30, 64, 76, the combination of Witek and Botto disclose:

- “The utilized search methodology is the hierarchical search, the search criteria is selected one of a list of one or more directory items” “A hierarchical search” corresponds to

Art Unit: 2161

“category search” because the categories include subcategories that organized in a hierarchical order. See Fig. 4, 6 – 7, col. 31, lines 4 – 11 of Witek.

◆ As per claims 6, 52, 77, the combination of Witek and Botto disclose:

- “The utilized search methodology is the dichotomous key search, the search criteria is a selected one of two binary items” See Fig. 3, element 70, col. 16, lines 27 – 50, Fig. 10, element 144 – 146 of Witek. As defined in the Specification a “dichotomous key search” is used to instruct users given in an answer or question dialog, often yes or no answer (Specification, page 18, lines 6 – 8). In fig. 10, Witek also gives the users the options of answer questions by checking the boxes. Therefore, this search option is corresponding to the “dichotomous key search”.

◆ As per claims 7, 20, 31, 44, 55, 68, 79, 92, the combination of Witek and Botto disclose:

- “The searchable database is distributed into more than one physical location” See Fig. 1, element 20, col. 9, lines 53 – col. 10, lines 5, col. 25, lines 37 – 44 of Witek.

◆ As per claims 8 – 10, 17 – 19, 32 – 34, 41 – 43, 56 – 58, 65 – 67, 80 – 82, 89 – 91, the combination of Witek and Botto disclose:

- “ The steps of utilizing the search methodologies are performed by a server” See Fig. 1, 5A, col. 25, lines 13 – 33 of Witek.
- “ Establishing an Internet connection with the server to utilize the search methodologies” See Fig. 5a, element 14, 24, col. 21, lines 15 – 20 of Witek.

◆ As per claims 11 – 12, 21 – 22, 35 – 36, 45 – 46, 59 – 60, 69 – 70, 83 – 84, 93 – 94, the combination of Witek and Botto disclose:

- “The searchable database is formatted in a directory tree structure” See Fig. 4, col. 18, lines 1 – 32 of Witek.
  - “The directory tree structure includes nodes ... branches” See fig. 4. Each category corresponds to a node. All nodes are linked together.
  - “The collection of related data for a particular node is displayed in an encyclopedia like format, wherein the encyclopedia like format includes text, graphics, and links to related topics” See Fig. 8 – 10, col. 23, lines 44 – 48, col. 24, lines 10 – 16 of Witek.
- ♦ As per claims 13 – 14, 23 – 24, 37 – 38, 47 – 48, 61 – 62, 71 – 72, 85 – 86, 95 – 96, the combination of Witek and Botto disclose:
- “Maintaining the node by appropriately adding and deleting data to and from the node” See col. 50, lines 4 – 15 of Witek.
  - “ The step of maintaining the node is performed by a node owner” See Fig. 14, col. 50, lines 4 – 15 of Witek. “ A node owner” corresponds to the system administrator.

### ***Response to Arguments***

6. Applicant's arguments filed 3/28/2005 have been fully considered but they are not persuasive.

Applicant argues that the Witek reference does not teach performing a search in which for any given searching step, at any location within the database, three or more different search methodologies are available to be used to perform the search. The Examiner respectfully disagrees.

Applicant also does not clearly claim “ at any step location within the database, three or more different methodologies are available to be used to perform the search”. In stead, Applicant only



Art Unit: 2161

claims that “wherein each utilization of the search module includes the availability of each search”. Therefore, if the Witek discloses one of the methods and the method is available for the search process, then the Witek still can apply to the invention.

***Conclusion***

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to CamLinh Nguyen whose telephone number is (571) 272 - 4024. The examiner can normally be reached on Monday-Friday.

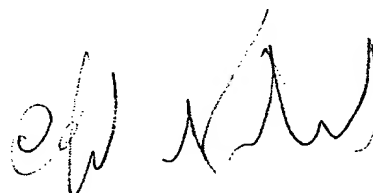
If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, Safet Metjahic can be reached on (571) 272 - 4023. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2161

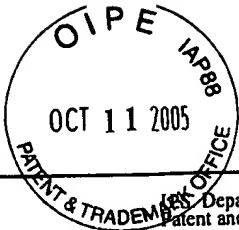
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Cam-Linh Nguyen  
Art Unit 2171

LN

A handwritten signature in black ink, appearing to read 'Alford Kindred', written in a cursive style.

ALFORD KINDRED  
PRIMARY EXAMINER



FORM PTO-1449 (Modified)		U.S. Department of Commerce Patent and Trademark Office		Attorney Docket No.: ITLV-00102		Serial No.: 09/801,138		
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use Several Sheets If Necessary)				Applicant: Robert Olan Keith, Jr.				
				Filing Date: March 06, 2001		Group Art Unit: 2161		
(37 CFR § 1.98(b))								
U.S. PATENT DOCUMENTS								
Examiner Initials		Serial / Patent Number	Issue Date	Applicant / Patentee	Class	Subclass	Filing Date	
LN	AA	6,133,938	10/17/00	James	348	8	03/11/99	
LN	AB	6,292,894 B1	09/18/01	Chipman et al.	713	168	11/23/99	
	AC							
	AD							
	AE							
	AF							
	AG							
	AH							
	AI							
	AJ							
	AK							
	AL							
	AM							
	AN							
	AO							
FOREIGN PATENTS OR PUBLISHED FOREIGN PATENT APPLICATIONS								
		Document Number	Publication Date	Country / Patent Office	Class	Subclass	Translation	
							Yes	No
	AP							
	AQ							
	AR							
	AS							
	AT							
OTHER DOCUMENTS (Including Author, Title, Date, Relevant Pages, Place of Publication)								
	AU							
	AV							
	AW							
	AX							
	AY							
	AZ							
	BA							
	BB							
	BC							
Examiner: <i>Vijay Kumar</i>				Date Considered: 5/9/05				
EXAMINER: Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.								